Naval Station Newport - Attachment H In-Kind Consideration, Project and Performance Scope of Work

Project Overview

Scope of Work

BQ Energy shall design, install, maintain and ensure the performance of a nominal 7.9 MW combined heat and power ("CHP") plant as In-Kind Consideration ("IKC") for Naval Station (NS) Newport. The In-Kind Project (CHP plant and the performance of the plant) shall be built as a "behind the meter" system, where power will be delivered to NS Newport at no cost for DON's exclusive use and displaces purchases from the gas and electric utility, National Grid. The In-Kind Project shall be installed and operated, including operations during utility grid outage, to meet energy production levels in accordance with National Grid Energy Efficiency Retrofit Incentive requirements for the term of the incentive agreement, and in accordance with installation requirements to be developed in the Standard Operating Procedure ("SOP"), as defined in the Performance Criteria section below), for the remainder of the Lease term ("Production Level Requirements".)

The Government will accept IKC in lieu of cash rent, where the following conditions are true:

- CHP has been properly commissioned and tested based on industry and DON standards.
- Ongoing energy production from the CHP plant must continue at a level that
 substantiates the initial hardware value throughout the term of the Lease. The installed
 and commissioned CHP is valued based on an expectation of sustained performance, and
 if that performance degrades below the "Production Level Requirements", the received
 value to the Government is degraded accordingly. Thus, the energy production levels and
 annual operating times will be in accordance with "Production Level Requirements".
- All energy produced by the CHP system shall be delivered to the DON.

The scope of the IKC encompasses design, installation, maintenance, and performance of a CHP
generation plant,
The lessee shall provide all hardware, software and other necessary material required for the
integration of the CHP to the NS Newport main electrical substation



BQ Energy shall also install and maintain fencing along the installation boundary surrounding Tank Farms 4 & 5. The fence shall have the following minimum specification: galvanized steel, 4 feet high, 9-gauge wire mesh, schedule 40, 1-5/8" top rail, no barbed wire, 2" posts in concrete and are at 10 feet off center. BQ energy shall also install one gate at entrance to each of the Tank Farms in accordance with the following specifications: galvanized steel, in concrete, 4' high, 8' wide, 2" frame and two 4' wide swing gate sections. Plastic signage shall be installed every 20 LF with text reading "US Government Property, no trespassing".

Upon completion, this fence including the gate shall be owned by NS Newport and maintained by BQ Energy for the duration of the Lease term.

Performance Criteria - Ownership, Training, Operation and Maintenance

BQ Energy shall own and maintain the new CHP plant for a term not to exceed the expiration date of this Lease. Except as otherwise stated in the corresponding IKC Easement, or in Government's written approval, upon expiration or earlier termination of the IKC Easement, Lessee shall promptly remove the Improvements and restore the IKC Easement Premises to substantially the same condition that existed when the term of this IKC Easement began, or to a condition that is acceptable to Government. BQ Energy and NS Newport shall develop a mutually agreeable standard operating procedure (SOP) for the operation and maintenance of the CHP plant. This plan is developed in order to submit, administer and pursue the performance of warranties related to the equipment and IKC "Production Level Requirements". BQ will be responsible for all maintenance and repairs/replacements and the Navy bears the responsibility of the day-to-day operations of the installed equipment and systems in accordance with SOPs provided by the contractor. BQ Energy shall provide operator training to DON/PWD operators.

Operation and maintenance requirements shall be defined in a definitive O&M agreement to be established with the installation prior to the completion of the construction of the CHP plant. The scope shall include standard preventative maintenance, warranty administration, spare parts management, performance monitoring, operational reporting, operational and safety plans, and corrective maintenance to be performed with mutually agreed upon response times. Maintenance may be performed by a third party subcontractor to BQ Energy to be pre-approved by DON. DON shall grant such subcontractor access rights to the facility for the CHP installation, and maintenance activities.

BQ is also responsible for maintenance outside of the leased premises as depicted in Figure H-2 (Land Maintenance Area Outside of Leased Premises) below and Attachment "A" to the Lease.

Fig H-1 One Line Diagram for New Generation Interconnection



Figure H-2: Land Maintenance Area Outside of Leased Premises



Figure H-3: Design and Construction Submittal Requirement List

Design Phase	Required Submittal List				
30% Design	Site Layout Diagram (site plan, key plan)				
	Existing and new one-Line Diagrams				
	Equipment Layout Diagram (Electrical arrangement/Elevation drawings)				
	Show removals and relocations, if any. If extensive, provide separate drawing(s)				
	Interconnection Diagram (Substation or Line tap)				
	All applicable design studies				
	All applicable design calculations including equipment ratings				
	List Equipment Specification/Manufacture data sheets				
	Civil/Structural Drawings and Calculations				
	Grounding Details				
	All previous design comments shall be incorporated				
	Detailed Civil/Structural Calculations				
	Detailed Civil/Structural Drawings				
	Detailed new and existing One-Line Diagram				
	Detailed Equipment Layout Diagram (Electrical arrangement/Elevation drawings)				
60% Design	Detailed applicable design calculations including equipment ratings				
	Interconnection Diagram (Substation or Line tap)				
	Cable/Conduit Layout and Panel Schedule				
	Detailed Grounding Details				
	Approved Vendor Diagrams, Equipment Specification/Manufacture data sheets				
	Bill of Material (BOM)				
	Site Layout Diagram (site plan, key plan) indicating new changes.				
	All previous design comments shall be incorporated				
	Complete and approved one-Line Diagrams				
	Complete Equipment Layout Diagram (Electrical arrangement/Elevation drawings)				
	Show removals and relocations, if any. If extensive, provide separate drawing(s)				
90% Design	Interconnection Diagram (Substation or Line tap)				
(Pre-final)	Cable/Conduit Layout and Panel Schedule				
	Complete Grounding Details				
	All applicable design studies and reports (i.e. Load flow, Fault Analysis, Short Circuit, Arc Flash, and Relay Coordination)				
	Bill of Material (BOM)				
	Approved Vendor Diagrams, Equipment Specification/Manufacture data sheets				
As-Built Design	Complete approved above listed drawings and documents				
	Operation and Maintenance Manual (including Sequence of Control Operation)				
	Equipment commissioning, start-up, and functional testing reports				
All utilities con	necting to the installation infrastructure will need to be reviewed for technical				

All utilities connecting to the installation infrastructure will need to be reviewed for technical compliance. Any information labeled as "proprietary" will need to be made available for review by designated government personnel.